



Lancaster Laboratories  
Environmental

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# Analysis Report

Partial Report

Sample Description:

**Ex. 6 - Personal Privacy**

~~Wolverine World Wide~~

Tetra Tech, Inc.

ELLE Sample #:

ELLE Group #:

Matrix: Water

Ex. 6 - Personal Privacy

Project Name:

**Wolverine World Wide Tannery**

Submittal Date/Time: 12/29/2017 10:00

Collection Date/Time: 12/27/2017 08:38

SDG#:

Ex. 6 - Personal Privacy

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>Misc. Organics</b>		<b>EPA 537 Version 1.1</b>	ng/l	ng/l	
14070	NEtFOSAA	2991-50-6	N.D.	2	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.				
14070	NMeFOSAA	2355-31-9	N.D.	2	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.				
14070	Perfluorobutanesulfonate	375-73-5	N.D.	2	1
14070	Perfluorodecanoic acid	335-76-2	N.D.	2	1
14070	Perfluorododecanoic acid	307-55-1	N.D.	2	1
14070	Perfluoroheptanoic acid	375-85-9	N.D.	2	1
14070	Perfluorohexanesulfonate	355-46-4	N.D.	2	1
14070	Perfluorohexanoic acid	307-24-4	N.D.	2	1
14070	Perfluorononanoic acid	375-95-1	N.D.	2	1
14070	Perfluoro-octanesulfonate	1763-23-1	N.D.	2	1
14070	Perfluorooctanoic acid	335-67-1	N.D.	2	1
14070	Perfluorotetradecanoic acid	376-06-7	N.D.	3	1
14070	Perfluorotridecanoic acid	72629-94-8	N.D.	2	1
14070	Perfluoroundecanoic acid	2058-94-8	N.D.	2	1

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14070	Full List PFAS - DW	EPA 537 Version 1.1	1	17363008	01/02/2018 21:33	Marissa C Drexinger	1
14070	Full List PFAS - DW	EPA 537 Version 1.1	1	17363008	01/04/2018 23:55	Marissa C Drexinger	1

Sample Description:

**Ex. 6 - Personal Privacy**

~~Wolverine World Wide~~

Tetra Tech, Inc.

ELLE Sample #:

ELLE Group #:

Matrix: Water

Ex. 6 - Personal Privacy

Project Name:

**Wolverine World Wide Tannery**

Submittal Date/Time: 12/29/2017 10:00

Collection Date/Time: 12/27/2017 09:46

SDG#:

Ex. 6 - Personal Privacy

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>Misc. Organics</b>		<b>EPA 537 Version 1.1</b>	ng/l	ng/l	
14070	NEtFOSAA	2991-50-6	N.D.	2	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.				
14070	NMeFOSAA	2355-31-9	N.D.	2	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.				
14070	Perfluorobutanesulfonate	375-73-5	N.D.	2	1
14070	Perfluorodecanoic acid	335-76-2	N.D.	2	1
14070	Perfluorododecanoic acid	307-55-1	N.D.	2	1
14070	Perfluoroheptanoic acid	375-85-9	N.D.	2	1
14070	Perfluorohexanesulfonate	355-46-4	N.D.	2	1

Reference ID:

1891712080118164314



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# Analysis Report

Partial Report

Sample Description:

**Ex. 6 - Personal Privacy**

Wolverine World Wide

Tetra Tech, Inc.

ELLE Sample #:

ELLE Group #:

Matrix: Water

Ex. 6 - Personal Privacy

Project Name:

Wolverine World Wide Tannery

Submittal Date/Time: 12/29/2017 10:00

Collection Date/Time: 12/29/2017 00:00

SDG#: Ex. 6 - Personal Privacy

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>Misc. Organics</b>		<b>EPA 537 Version 1.1</b>	ng/l	ng/l	
14070	Perfluorohexanoic acid	307-24-4	N.D.	2	1
14070	Perfluorononanoic acid	375-95-1	N.D.	2	1
14070	Perfluoro-octanesulfonate	1763-23-1	N.D.	2	1
14070	Perfluorooctanoic acid	335-67-1	N.D.	2	1
14070	Perfluorotetradecanoic acid	376-06-7	N.D.	3	1
14070	Perfluorotridecanoic acid	72629-94-8	N.D.	2	1
14070	Perfluoroundecanoic acid	2058-94-8	N.D.	2	1

The recovery for PFHxS in the laboratory fortified blank duplicate (LFBD) is outside of QC acceptance limits as noted on the QC Summary.

The data reported should be considered preliminary as this sample will be re-extracted.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
14070	Full List PFAS - DW	EPA 537 Version 1.1	1	18004006	01/08/2018 07:35	Marissa C Drexinger	1

Reference ID:  
1891712080118164314

## ***Environmental Analysis Request/Chain of Custody***



**Lancaster Laboratories  
Environmental**

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 10459 Group # 1891712 Sample # 9388817-45

**COC #** 540829

Client Information						Matrix			Analysis Requested										For Lab Use Only							
Client: MSG/Tetra Tech			Acct. #:			<input type="checkbox"/> Tissue <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Water <input type="checkbox"/> Other:			Preservation Codes										FSC:							
Project Name/#: Wolverine World Wide			PWSID #:																SCR#:							
Project Manager: BRENT RITCHIE			P.O. #: 217808																Preservation Codes H=HCl      T=Thiosulfate N=HNO <sub>3</sub> B=NaOH S=H <sub>2</sub> SO <sub>4</sub> O=Other							
Sampler: BLR/C. Remar			Quote #:																Remarks							
State where samples were collected: MI			For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																							
Sample Identification			Collected		Grab	Composite	Soil	Water	Other:	Total # of Containers	PFAS											MS/MSD				
			Date	Time																						
Ex. 6 - Personal Privacy			12/17	0835	X					1	X															
				0838	X					2	X															
				0854	X					2	X															
				0946	X					1	X															
				0950	X					2	X															
				0955	X					6	X															
				1054	X					1	X															
	1057	X					2	X																		
	1102	X					2	X																		
Turnaround Time (TAT) Requested (please circle)						Relinquished by			Date	Time	Received by			Date	Time											
Standard Rush						<i>[Signature]</i>			12-21-17	2000																
(Rush TAT is subject to laboratory approval and surcharge.)						Relinquished by			Date	Time	Received by			Date	Time											
Date results are needed: 5-DAY						Relinquished by			Date	Time	Received by			Date	Time											
E-mail address: britchier@mamichsmithgroup.com						Relinquished by			Date	Time	Received by			Date	Time											
Data Package Options (circle if required)						Relinquished by			Date	Time	Received by			Date	Time											
Type I (EPA Level 3 Equivalent/non-CLP)						Type VI (Raw Data Only) Level IV									Date	Time										
Type III (Reduced non-CLP)						NJ DKQP TX TRRP-13									12/21/17	1000										
NYSDEC Category A or B						MA MCP CT RCP																				
EDD Required? Yes No						If yes, format:			Site-Specific QC (MS/MSD/Dup)? Yes No			Relinquished by Commercial Carrier:			Temperature upon receipt											
												UPS FedEx X Other			0.9 / 1.0 °C											

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The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0216

## ***Environmental Analysis Request/Chain of Custody***



**Lancaster Laboratories  
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Acct. # 10459 Group # 1891712 Sample # 9388817

**COC #** 540830

Client Information				Matrix				Analysis Requested												For Lab Use Only	
Client: MSG/Tetra Tech				Acct. #:				Preservation Codes												FSC: _____	
Project Name/ #: Wolverine World Wide				PWSID #:																SCR#: _____	
Project Manager: BRENT RITCHIE				P.O. #: 217808																Preservation Codes	
Sampler: BLR/C. Renner				Quote #:																H=HCl T=Thiosulfate	
State where samples were collected: MI				For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																N=HNO <sub>3</sub> B=NaOH	
Sample Identification				Collected		Grab	Composite	Soil <input type="checkbox"/>	Sediment <input type="checkbox"/>	Tissue <input type="checkbox"/>	Potable <input checked="" type="checkbox"/>	Ground <input type="checkbox"/>	Surface <input type="checkbox"/>	NPDES	Other:	Total # of Containers	Remarks				
				Date	Time																
Ex. 6 - Personal Privacy				122717	1156	X															
				1	1202	X															
					1207	X															
					1207	X															
					1250	X															
					1253	X															
					1258	X															
					1438	X															
				1440	X																
				1445	X																
Turnaround Time (TAT) Requested (please circle)				Relinquished by				Date		Time		Received by				Date		Time			
Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/>				[Signature]				12.29.17		200		[Signature]									
(Rush TAT is subject to laboratory approval and surcharge.)				Relinquished by				Date		Time		Received by				Date		Time			
Date results are needed: 5-day				Relinquished by				Date		Time		Received by				Date		Time			
E-mail address: britchie@mannh.smithgroup.com				Relinquished by				Date		Time		Received by				Date		Time			
Data Package Options (circle if required)				Relinquished by				Date		Time		Received by				Date		Time			
Type I (EPA Level 3 Equivalent/non-CLP)				Type VI (Raw Data Only)																	
Type III (Reduced non-CLP)				Level IV																	
NYSDEC Category A or B				NJ DKQP TX TRRP-13																	
MA MCP CT RCP				EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Relinquished by Commercial Carrier:													
				If yes, format: _____				UPS _____ FedEx <input checked="" type="checkbox"/> Other _____													
				Site-Specific QC (MS/MSD/Dup)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Temperature upon receipt 1.3 °C													
				(If yes, indicate QC sample and submit triplicate sample volume.)																	

## ***Environmental Analysis Request/Chain of Custody***



**Lancaster Laboratories  
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For Eurofins Lancaster Laboratories Environmental use only

Acct. # 10459 Group # 1891712 Sample # 9388817-45

**COC # 540817**

[illegible]

## Environmental Analysis Request/Chain of Custody



**Lancaster Laboratories  
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For Eurofins Lancaster Laboratories Environmental use only

Acct. # 10459 Group # 1891712 Sample # 9388817-45

**COC #** 540816

[illegible]



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## Sample Administration Receipt Documentation Log

Doc Log ID: 205017



Group Number(s): 1891712

Client: MSG/TETRA TECH

### Delivery and Receipt Information

Delivery Method:	<u>Fed Ex</u>	Arrival Timestamp:	<u>12/29/2017 10:00</u>
Number of Packages:	<u>4</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>MI</u>		

### Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace $\geq$ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Wendy Wakeley (1669) at 11:06 on 12/29/2017*

### Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	3.6	DT	Wet	Y	Bagged	N
2	DT146	1.3	DT	Wet	Y	Bagged	N
3	DT146	0.4	DT	Wet	Y	Bagged	N
4	DT146	1.0	DT	Wet	Y	Bagged	N



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# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>BMQL</b>	Below Minimum Quantitation Level	<b>mg</b>	milligram(s)
<b>C</b>	degrees Celsius	<b>mL</b>	milliliter(s)
<b>cfu</b>	colony forming units	<b>MPN</b>	Most Probable Number
<b>CP Units</b>	cobalt-chloroplatinate units	<b>N.D.</b>	non-detect
<b>F</b>	degrees Fahrenheit	<b>ng</b>	nanogram(s)
<b>g</b>	gram(s)	<b>NTU</b>	nephelometric turbidity units
<b>IU</b>	International Units	<b>pg/L</b>	picogram/liter
<b>kg</b>	kilogram(s)	<b>RL</b>	Reporting Limit
<b>L</b>	liter(s)	<b>TNTC</b>	Too Numerous To Count
<b>lb.</b>	pound(s)	<b>µg</b>	microgram(s)
<b>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
<b>meq</b>	milliequivalents	<b>umhos/cm</b>	micromhos/cm
<b>&lt;</b>	less than		
<b>&gt;</b>	greater than		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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## Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
J (or G, I, X)	Estimated value $\geq$ the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column $>40\%$ . The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column $>100\%$ . The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.

Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.